

CORRELATION AND PATH ANALYSIS OF FRUIT YIELD AND IT'S CONTRIBUTING TRAITS IN BRINJAL (*SOLANUM MELONGENA* L.)

RandhirLalAmbade*, Sunil KumarVerma and Nandan Mehta

Department of Genetics and Plant Breeding, IGKV, Raipur, Chhattisgarh, 492 012, India

*E-mail: randhir.pbg@gmail.com

Abstract: Correlation and path analysis for yield components and fruit characters was studied in twenty seven crosses using Line x Tester analysis between twelve parents consisted of nine lines (local genotypes of Chhattisgarh) viz., IGB 35, IGB 43, IGB 44, IGB 52, IGB 54, IGB 55, IGB 65, IC 31, IC35 and three testers (improved varieties) viz., DBR 8, KS 224 and JBR 03 16. Highly significant and positive correlation of days to first flowering was observed with days to first fruiting at phenotypic level and it also reported significant negative correlation with number of primary branches per plant at genotypic level and it had significant negative correlation with number of fruits per plant at genotypic level. Path analysis considering total fruit yield per plant as dependent trait indicated that plant height, number of fruits per cluster, number of primary branches per plant and fruit length were most important characters contributing directly towards total fruit yield per plant, indicating effectiveness of simple selection for improvement of these characters.

Keywords: Brinjal, Correlation, Path analysis, Yield

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